

SEQUENCE LISTING

SEQ ID NO:1

Mouse TGR18 DNA: (start and stop codons in bold)

5 GCTCCTGGCAGAGTTTTCTGTGCGAGACAGAAGCCGACAGCAGAATGGCACAGAATTTATC
 TTGTGAGAATTGGTTGGCAACAGAGGCTATCTTGAATAAGTACTACCTCTCTGCATTTTA
 TGCAATCGAGTTCATTTTTTGGACTGCTTGGGAATGTCAGTGTGGTGTTCGGCTACCTCTT
 CTGCATGAAGAACTGGAACAGCAGCAATGTCTATCTTTTTAACCTTTCCATCTCTGACTT
 TGCTTTCCTGTGCACCCTTCCCATCCTGATAAAGAGTTATGCCAATGATAAGGGGACCTA
 10 TGGAGATGTTCTCTGTATAAGCAACCGATATGTGCTTCACACCAACCTCTACACCAGCAT
 CCTCTTCCTCACTTTCATTAGCATGGACCGATATCTGCTCATGAAGTACCCTTTCCGAGA
 AACTTTCTACAAAAGAAGGAATTTGCCATTTTAATCTCGCTGGCTGTCTGGGCCTTAGT
 GACCTTAGAAGTTCTACCCATGCTCACTTTCATCAATTCTGTCCCAAAGAAGAGGGCAG
 TAACTGCATCGACTATGCAAGTTCTGGAAACCCTGAACACAATCTCATTTACAGCCTCTG
 15 CCTGACTTTGTTGGGCTTCCTAATTCCTCTCTCTGTGATGTGCTTCTTCTACTACAAGAT
 GGTAGTCTTCTTAAAGAGGAGGAGCCAGCAGCAAGCAACTGCCCTGCCACTGGACAAACC
 CCAACGCCTGGTGGTCCCTGGCGGTTGTGATCTTCTCTATACTCTTCACACCCTATCATAT
 CATGCGCAATTTGAGGATCGCCTCACGCCTGGATAGTTGGCCACAAGGATGTACACAGAA
 GGCCATCAAATCTATATACACACTGACACGGCCTCTGGCCTTTCTGAACAGTGCCATCAA
 20 TCCCATCTTCTACTTCCTCATGGGAGACCATTACAGAGAGATGCTGATTAGTAAGTTCAG
 ACAATACTTCAAGTCCCTTACATCCTTCAGGACATGAGCTGCTGGATGCAGGTCTTCACT
 CAGCCAAAATGAGACACTTGATAAACAGTGCTGTGCAGTTGAGTTTTAACTAAGTAAACC
 ACCATTTCTAGGCTTTAGCTTTCCACCATCCTCCAACCCCCAGGGCTGGAGTACAAGCTG
 GGTCCACATGAATCAGAAGGCAGCTCTCTGTTCTGATTTTAGGTTATACCCAGAGTATGG
 25 AAAAAATAAGGCATGAGAAAGCATTGACATCTTCACTTAAGAACTGAACAAAAGAGAACA
 AATATTGTCAATGTTTGGACACTTAGGATCTGAAATCTTGGAAATTTTAAGACCTCTTTT
 TCTATCAGTGTAAGGAATACAAGATAGCTAGTTGCAAATGCTGAATGCATTTTCATCAT
 TGGTCAGGTCGATAAGCGTGTTTCTGAAATAGTCTTATTTTTATTCTTGTAATATTAAAA
 TTTATGTGAAAAATGAATATAATTCAATGTACAACATTAGATTTTCTATTTGAAAATTAT
 30 ATTTCTTGAAAAATAACTGCTGTGCCTAAATAAATCAATATA

SEQ ID NO:2

Mouse TGR18 protein

MAQNLSCENWLATEAILNKYYLSAFYAIEFIFGLLGNVTVVFGYLFCMKNWNSSNVYLFN
LSISDFAFLCTLPILIKSYANDKGTYGDLVLCISNRYVLHTNLYTSILFLTFISMDRYLLM
KYPFREHFLQKKEFAILISLAVWALVTLEVLPLMTFINSVPKEEGSNCIDYASSGNPEHN
5 LIYSLCLTLLGFLIPLSVMCFFYYKMVFLKRRSQQATALPLDKPQRLVVLAVVIFSIL
FTPYHIMRNLRIASRLDSWPQGCTQKAIKSIYTLTRPLAFLNSAINPIFYFLMGDHYREM
LISKFRQYFKSLTSFRT

10 SEQ ID NO:3

Human TGR 21 DNA

ATGGAGGATCTCTTTAGCCCCCTCAATTCTGCCGCCGGCGCCCAACATTTCCGTGCCCATC
TTGCTGGGCTGGGGTCTCAACCTGACCTTGGGGCAAGGAGCCCCTGCCTCTGGGCCGCCC
15 AGCCGCCGCGTCCGCCTGGTGTTCCTGGGGGTGTCCTGGTGGTGGCGGTGGCAGGCAAC
ACCACAGTGCTGTGCCGCCTGTGCGGCGGCGGCGGGCCCTGGGCGGGCCCCAAGCGTCGC
AAGATGGACTTCCTGCTGGTGCAGCTGGCCCTGGCGGACCTGTACGCGTGCGGGGGCACG
GCGCTGTACAGCTGGCCTGGGAACTGCTGGGCGAGCCCCGCGCGGCCACGGGGGACCTG
GCGTGCCGCTTCCTGCAGCTGCTGCAGGCATCCGGGCGGGGCGCCTCGGCCACCTCGTG
20 GTGCTCATCGCCCTCGAGCGCCGGCGCGCGGTGCGTCTTCCGCACGGCCGGCCGCTGCC
GCGCGTGCCCTCGCCGCCCTGGGCTGGCTGCTGGCACTGCTGCTGGCGCTGCCCCGGCC
TTCGTGGTGC GCGGGGACTCCCCCTCGCCGCTGCCGCCGCCGCCGCCGCAACGTCCCTG
CAGCCAGGCGCGCCCCCGGCCGCCCGCCCTGGCCGGGGGAGCGTCGCTGCCACGGGATC
TTCGCGCCCCCTGCCGCGCTGGCACCTGCAGGTCTACGCGTTCTACGAGGCCGTGCGGGC
25 TTCGTGCGCCTGTTACGGTCTTGGGCGTCGCTTGCGGCCACCTACTCTCCGTCTGGTGG
CGGCACCGGCCGAGGCCCCCGCGGCTGCAGCGCCCTGGTTCGGCGAGCCAGGTGAGACC
CCTGCGCCCAGCGCGCTGCCCCGCGCCAAGGTGCAGAGCCTGAAGATGAGCCTGCTGCTG
GCGCTGCTGTTTCGTGGGCTGCGAGCTGCCCTACTTTGCCGCCCGGCTGGCGGCCGCGTGG
TCGTCCGGGCCCCGCGGGAGACTGGGAGGGAGAGGGCCTGTCGGCGGCGCTGCGCGTGGTG
30 GCGATGGCCAACAGCGCTCTCAATCCCTTCGTCTACCTCTTCTTCCAGGCGGGCGACTGC
CGGCTCCGGCGACAGCTGCGGAAGCGGCTGGGCTCTCTGTGCTGCGCGCCGACAGGAGGC
GCGGAGGACGAGGAGGGGCCCCGGGGCCACCAGGCGCTCTACCGCCAACGCTGGCCCCAC
CCTCATTATCACCATGCTCGGCGGGAACCGCTGGACGAGGGCGGCTTGCGCCACCCCCT
CCGCGCCCCAGACCCCTGCCTTGCTCCTGCGAACTGCCTTCTAG

SEQ ID NO:4

Human TGR21 Protein:

5

MEDLFSPSILPPAPNISVPILLGWGLNLTGQGAPASGPPSRRVRLVFLGVILVVAVAGN
TTVLCRLCGGCGPWAGPKRRKMDFLLVQLALADLYACGGTALSQLAWELLGEPRAATGDL
ACRFLQLLQASGRGASAHLVVLIALERRAVRLPHGRPLPARALAALGWLLALLLALPPA
FVVRGDSPLPPPPPTSLQPGAPPAARAWPGERRCHGIFAPLPRWHLQVYAFYEAVAG
10 FVAPVTVLGVACGHLLSVWWRHRPQAPAAAAPWSASPGRAPAPSALPRAKVQSLKMSLLL
ALLFVGCELPYFAARLAAWSSGPAGDWEGEGLSALRVVAMANSALNPFVYLFFQAGDC
RLRRQLRKRLGSLCCAPOGGAEDEEGPRGHQALYRQRWPHPHYHHARREPLDEGGLRPPP
PRPRPLPCSCESAF

15

SEQ ID NO:5

Human TGR62 DNA (start and stop codons in bold)

20

TGACCTTCTTCATCATTGATGTG**ATG**CCAGATACTAATAGCACAATCAATTTATCACTA
AGCACTCGTGTTACTTTAGCATTTTTATGTCCTTAGTAGCTTTTGCTATAATGCTAGGA
AATGCTTTGGTCATTTTAGCTTTTGTGGTGGACAAAACCTTAGACATCGAAGTAGTTAT
TTTTTTCTTAACCTGGCCATCTCTGACTTCTTGTGGGTGTGATCTCCATTCCTTTGTAC
ATCCCTCACACGCTGTTTGAATGGGATTTTGGAAAGGAAATCTGTGTATTTTGGCTCACT
ACTGACTATCTGTTATGTACAGCATCTGTATATAACATTGTCCTCATCAGCTATGATCGA
25 TACCTGTCAGTCTCAAATGCTGTGTCTTATAGA**ACT**CAACATACTGGGGTCTTGAAGATT
GTTACTCTGATGGTGGCCGTTTGGGTGCTGGCCTTCTTAGTGAATGGGCCAATGATTCTA
GTTTCAGAGTCTTGAAGGATGAAGGTAGTGAATGTGAACCTGGATTTTTTTCGGAATGG
TACATCCTTGCCATCACATCATTCTTGAATTCGTGATCCCAGTCATCTTAGTCGCTTAT
TTCAACATGAATATTTATTGGAGCCTGTGGAAGCGTGATCATCTCAGTAGGTGCCAAAGC
30 CATCCTGGACTGACTGCTGTCTCTTCCAACATCTGTGGACACTCATTGAGAGGTAGACTA
TCTTCAAGGAGATCTCTTCTGCATCGACAGAAGTTCCTGCATCCTTTCATTGAGAGAGA
CAGAGGAGAAAGAGTAGTCTCATGTTTTCTCAAGAACCAAGATGAATAGCAATACAATT
GCTTCCAAAATGGGTTCCTTCTCCAATCAGATTCTGTAGCTCTTCACCAAAGGGAACAT
GTTGAACTGCTTAGAGCCAGGAGATTAGCCAAGTCACTGGCCATTCTCTTAGGGGTTTTT

GCTGTTTGCTGGGCTCCATATTCTCTGTTCAACAATTGTCCTTTCATTTTATTCCTCAGCA
ACAGGTCCTAAATCAGTTTGGTATAGAATTGCATTTTGGCTTCAGTGGTTCAATTCCTTT
GTCAATCCTCTTTTGTATCCATTGTGTCAACAAGCGCTTTCAAAAGGCTTCTTGAAAATA
TTTTGTATAAAAAAGCAACCTCTACCATCACAAACACAGTCGGTCAGTATCTTCTTAAAGA
5 CAATTTTCTCACCTCTGTAAATTTTAGTCTCAATCTCACCTAAATGAATCAGGTCTGCCC
TTTATC

SEQ ID NO:6

10 Human TGR62 protein

MPDTNSTINLSLSTRVTLAFFMSLVAFAIMLGNALVILAFVVDKNLRHRSSYFFLNLAIS
DFFVGVISIPLYIPHTLFEWDFGKEICVFWLTDDYLLCTASVYNIVLISYDRYLSVSNV
SYRTQHTGVLKIVTLMVAVWVLAFLVNGPMILVSESWKDEGSECEPGFFSEWYILAITSF
15 LEFVIPVILVAYFNMNIYWSLWKRDLHLSRCQSHPGTLAVSSNICGHSFRGRLSSRRSLSA
STEVPA SFH SERQRRKSSLMFSSRTKMNSNTIASKMGSFSQSDSVALHQREHVELLRARR
LAKSLAILLG VFAVCWAPYSLFTIVLSFYSSATGPKSVWYRIAFWLQWFNSFVNPLLYPL
CHKRFQKAFLKIFCIKKQPLPSQHRSVS

20

SEQ ID NO:7

Human TGR130.1 DNA (start and stop codons in bold):

GCCTCCTTCCTAGAGCCTTCAGTGGCCTCTGCCAGTCTGGCAGACACTTGCAGACCTCTC
25 TTCTCAGCACCACCAATCTCTGATGCCCTGCGATGCCACACTCAATACTTCTGCCTCTC
CACCCACATTCTTCTGGGCCAATGCCTCCGGAGGCAGTGTGCTGAGTGCTGATGATGCTC
CGATGCCTGTCAAATTCCTAGCCCTGAGGCTCATGGTTGCCCTGGCCTATGGGCTTGTGG
GGGCCATTGGCTTGCTGGGAAATTTGGCGGTGCTGTGGGTACTGAGTAACTGTGCCCGGA
GAGCCCCTGGCCCACCTTCAGACACCTTCGTCTTCAACCTGGCTCTGGCGGACCTGGGAC
30 TGGCACTCACTCTCCCCTTTTGGGCAGCCGAGTCGGCACTGGACTTTCACTGGCCCTTCG
GAGGTGCCCTCTGCAAGATGGTTCTGACGGCCACTGTCCTCAACGTCTATGCCAGCATCT
TCCTCATCACAGCGCTGAGCGTTGCTCGCTACTGGGTGGTGGCCATGGCTGCGGGGCCAG
GCACCCACCTCTCACTCTTCTGGGCCCCGAATAGCCACCCTGGCAGTGTGGGCGGCGGCTG
CCCTGGTGACGGTGCCACAGCTGTCTTCGGGGTGGAGGGTGAGGTGTGTGGTGTGCGCC

09891438-062501

TTTGCCTGCTGCGTTTCCCCAGCAGGTACTGGCTGGGGGCCTACCAGCTGCAGAGGGTGG
TGCTGGCTTTCATGGTGCCCTTGGGCGTCATCACCACCAGCTACCTGCTGCTGCTGGCCT
TCCTGCAGCGGCGGCAACGGCGGCGGCAGGACAGCAGGGTCGTGGCCCGCTCTGTCCGCA
TCCTGGTGGCTTCCTTCTTCTCTGCTGGTTTCCCAACCATGTGGTCACTCTCTGGGGTG
5 TCCTGGTGAAGTTTGACCTGGTGCCCTGGAACAGTACTTTCTATACTATCCAGACGTATG
TCTTCCCTGTCACTACTTGCTTGGCACACAGCAATAGCTGCCTCAACCCTGTGCTGTACT
GTCTCCTGAGGCGGAGCCCCGGCAGGCTCTGGCAGGCACCTTCAGGGATCTGCGGTCTGA
GGCTGTGGCCCCAGGCGGAGGCTGGGTGCAACAGGTGGCCCTAAAGCAGGTAGGCAGGC
GGTGGGTCTGCAAGCAACCCCCGGGAGAGCCGCCCTTCTACCCTGCTCACCAACCTGGACA
10 GAGGGACACCCGGGTGAAGGGCGCAAGCTGAACACACTCCTCTTTCTGAGATCCACCAAG
TGTAGGATCCTTGAGTCTTGGGGAGAAGCTGCCCTCTCTGCCAGGCTGCAGTGCCCTCAG
GGAAAAGTCTGATCTTTGATCCCCAACTCTGGGTGTGGTGAATGGGGGAGGCGGGGGCTC
AGATCAGAGCTGGATGTGACAAAGCTTAAGTCTTTATTTGGAGATGGGAAAGAAGAGGAT
CTGAGAATAAACCTCTGGATTATCC

15

SEQ ID NO:8

TGR130.1 Protein

20

MPTLNTSASPPTFFWANASGGSVLSADDAPMPVKFLALRLMVALAYGLVGAIGLLGNLAV
LWVLSNCARRAPGPPSDTFVFNALALDLGLALTLPFWAAESALDFHWPFGGALCKMVLTA
TVLNVIYASIFLITALSVARYWVWAMAAGPGTHLSLFWARIATLAVWAAAALVTVP TAVFG
VEGEVCGVRLCLLRFP SRYWLGAYQLQ RVVLAFMVPLGVITTSYLLLLAFLQRRQRRRQD
SRVVARSVRIILVASFFLCWFPNHVVT LWGVLVKFDLVPWNSTFYTIQTYVFPVTTCLAHS
25 NSCLNPVLYCLLRREPRQALAGTFRDLRSRLWPQGGGWVQQVALKQVGRRWVASNPRESR
PSTLLTNLDRGTPG

SEQ ID NO:9

30 TGR 130.2 DNA (start and stop codons in bold)

GCCTCCTTCCTAGAGCCTTCAGTGGCCTCTGCCAGTCTGGCAGACACTTGCAGACCTCTC
TTCTCAGCACCACCAATCTCTGATGCCCTGCGATGCCCCACACTCAATACTTCTGCCTCTC
CACCCACATTCTTCTGGGCCAATGCCTCCGGAGGCAGTGTGCTGAGTGCTGATGATGCTC

09891138-062501

5

10

15

20

25

CGATGCCTGTCAAATTCCTAGCCCTGAGGCTCATGGTTGCCCTGGCCTATGGGCTTGTGG
GGGCCATTGGCTTGCTGGGAAATTTGGCGGTGCTGTGGGTACTGAGTAACTGTGCCCCGA
GAGCCCCTGGCCACCTTCAGACACCTTCGTCTTCAACCTGGCTCTGGCGGACCTGGGAC
TGGCACTCACTCTCCCCCTTTGGGCAGCCGAGTCGGCACTGGACTTTCCTGGCCCTTCG
GAGGTGCCCTCTGCAAGATGGTTCTGACGGCCACTGTCCTCAACGTCTATGCCAGCATCT
TCCTCATCACAGCGCTGAGCGTTGCTCGCTACTGGGTGGTGGCCATGGCTGCGGGGCCAG
GCACCCACCTCTCACTCTTCTGGGCCCGAATAGCCACCCTGGCAGTGTGGGCGGCGGCTG
CCCTGGTGACGGTGCCACAGCTGTCTTCGGGGTGGAGGGTGAGGTGTGTGGTGTGCGCC
TTTGCTGCTGCGTTTCCCCAGCAGTACTGGCTGGGGGCCTACCAGCTGCAGAGGGTGG
TGCTGGCTTTTCATGGTGCCCTTGGGCGTCATCACCACCAGCTACCTGCTGCTGCTGGCCT
TCCTGCAGCGGCGGCAACGGCGGCGGCAGGACAGCAGGGTCGTGGCCCGCTCTGTCCGCA
TCCTGGTGGCTTCCTTCTTCTCTGCTGGTTTTCCCAACCATGTGGTCACTCTCTGGGGTG
TCCTGGTGAAGTTTGACCTGGTGCCCTGGAACAGTACTTTCTATACTATCCAGACGTATG
TCTTCCCTGTCACTACTTGCTTGGCACACAGCAATAGCTGCCTCAACCCTGTGCTGTACT
GTCTCCTGAGGCGGGAGCCCCGGCAGGCTCTGGCAGGCACCTTCAGGGATCTGCGGTTGA
GGCTGTGGCCCCAGGGCGGAGGCTGGGTGCAACAGGTGGCCCTAAAGCAGGTAGGCAGGC
GGTGGGTCGCAAGCAACCCCCGGGAGAGCCGCCCTTCTACCCTGCTCACCAACCTGGACA
GAGGGACACCCGGGTGAAGGGCGCAAGCTGAACACACTCCTCTTTCTGAGATCCACCAAG
TGTAGGATCCTTGAGTCCTGGGGAGAAGCTGCCCTCTCTGCCAGGCTGCAGTGCCCTCAG
GGAAAAGTCTGATCTTTGATCCCCAAGCTCTGGGTGTGGTGAATGGGGGAGGCGGGGGCTC
AGATCAGAGCTGGATGTGACAAAGCTTAAGTCTTTATTTGGAGATGGGAAAGAAGAGGAT
CTGAGAATAAACCTCTGGATTATCC

SEQ ID NO:10

human TGR130.2 protein

30

MPTLNTSASPPTFFWANASGGSVLSADDAPMEVKFLALRLMVALAYGLVGAIGLLGNLAV
LWVLSNCARRAPGPPSDTFVFNALALADLGLALTLPFWAAESALDFHWPFGGALCKMVLTA
TVLNVYASIFLITALSVARYWVMAAGPGTHLSLFWARIATLAVWAAAALVTVP TAVFG
VEGEVCGVRLCLLRFPSRYWLGA YQLQRVLA FMVPLGVITTSYLLLLAFLQRRQRRRQD
SRVVARSVRILVASFFLCWFPNHVVT LWGVLVKFDLVPWNSTFYTIQTYVFPVTTCLAHS
NSCLNPVLYCLLRREPRQALAGTFRDLRLRLWPQGGWVQQVALKQVGRRWVASNPRESR
PSTLLTNLDRGTPG

SEQ ID NO:11

Human TGR213 DNA

5

ATGGAGTCCTCACCCATCCCCAGTCATCAGGGAACCTCTTCCACTTTGGGGAGGGTCCCT
CAAACCCAGGTCCCTCTACTGCCAGTGGGGTCCCGAGGTGGGGCTACGGGATGTTGCT
TCGGAATCTGTGGCCCTCTTCTTCATGCTCCTGCTGGACTTGACTGCTGTGGCTGGCAAT
GCCGCTGTGATGGCCGTGATCGCCAAGACGCCTGCCCTCCGAAAATTTGTCTTCGTCTTC
10 CACCTCTGCCTGGTGGACCTGCTGGCTGCCCTGACCCTCATGCCCCCTGGCCATGCTCTCC
AGCTCTGCCCTCTTTGACCACGCCCTCTTTGGGGAGGTGGCCTGCCGCTCTACTTGTTT
CTGAGCGTGTGCTTTGTGAGCCTGGCCATCCTCTCGGTGTGAGCCATCAATGTGGAGCGC
TACTATTACGTAGTCCACCCATGCGCTACGAGGTGCGCATGACGCTGGGGCTGGTGGCC
TCTGTGCTGGTGGGTGTGTGGGTGAAGGCCTTGGCCATGGCTTCTGTGCCAGTGTTGGGA
15 AGGGTCTCCTGGGAGGAAGGAGCTCCAGTGTCCCCCAGGCTGTTCACTCCAGTGGAGC
CACAGTGCCTACTGCCAGCTTTTTGTGGTGGTCTTTGCTGTCTTTACTTTCTGTTGCCC
CTGCTCCTCATACTTGTGGTCTACTGCAGCATGTTCCGAGTGGCCCCGCTGGCTGCCATG
CAGCACGGGGCCGCTGCCCCAGTGGATGGAGACACCCCGCAACGCTCCGAATCTCTCAGC
AGCCGCTCCACGATGGTCACAGCTCGGGGGCCCCCAGACCACCCACACCGGACGTTT
20 GGGGGAGGGAAAGCAGCAGTGGTTCTCCTGGCTGTGGGGGGACAGTTCCTGCTCTGTTGG
TTGCCCTACTTCTCTTTCCACCTCTATGTTGCCCTGAGTGCTCAGCCCATTTCAACTGGG
CAGGTGGAGAGTGTGGTCACCTGGATTGGCTACTTTTGCTTCACTTCCAACCCTTTCTTC
TATGGATGTCTCAACCGGCAGATCCGGGGGGAGCTCAGCAAGCAGTTTGTCTGCTTCTTC
AAGCCAGCTCCAGAGGAGGAGCTGAGGCTGCCTAGCCGGGAGGGCTCCATTGAGGAGAAC
25 TTCCTGCAGTTCCTTCAGGGGACTGGCTGTCTTCTGAGTCCTGGGTTTCCCGACCCCTA
CCCAGCCCCAAGCAGGAGCCACCTGCTGTTGACTTTTGAATCCCAGGCCAGATAGCTGAG
GAGACCTCTGAGTTCCTGGAGCAGCAACTCACCAGCGACATCATCATGTCAGACAGCTAC
CTCCGTCCTGCCGCTCACCCCGGCTGGAGTCATGA

30

SEQ ID NO:12

Human TGR213 protein

09091138.062501

Sub
at
cont

MESSPIQSSGMSSTLGRVPQTPGPSTASGVPEVGLRDVASESVALFFMLLLDLTAVAGN
 AAVMAVIAKTPADRKFFVVFHLCVLDLLAALTLMPLAMLSSSALFDHALFGEVACRLYL
 LSVCFVSLAILSVSAINVERYYYYVHMPRYEVRMTLGLVASVLVGVWVKALAMASVPVLG
 RVSWEEGAPSVPPGCSLQWSHSAYCQLFVVVFAVLYFLLPLLLILVVYCSMFRVARVAAM
 5 QHGPLPTWMETPRQRSESLSSRSTMVTSSGAPQTTPHRTFGGGKAAVVLLAVGGQFLLCW
 LPYFSFHLVVALSAQPISTGQVESVVTWIGYFCFTSNPFFYGCLNRQIRGELSKQFVCF
 KPAPEEELRLPSREGSIEENFLQFLQGTGCPSESWSRPLPSPKQEPPAVDFRIPGQIAE
 ETSEFLEQQLTSDIIMSDSYLRPAASPRLES

10

SEQ ID NO:13

human novel edg receptor (hEDG) DNA:

15

ATGGAGTCGGGGCTGCTGCGGCCGCGCCGGTGAGCGAGGTCATCGTCCTGCATTACAAC
 TACACCGGCAAGCTCCGCGGTGCGCGCTACCAGCCGGGTGCCGGCCTGCGCGCCGACGCC
 GTGGTGTGCCTGGCGGTGTGCGCCTTCATCGTGCTAGAGAATCTAGCCGTGTTGTTGGTG
 CTCGGACGCCACCCGCGCTTCCACGCTCCCATGTTCTGCTCCTGGGCAGCCTCACGTTG
 TCGGATCTGCTGGCAGGCGCCGCTACGCCGCCAACATCCTACTGTGCGGGCCGCTCACG
 CTGAAACTGTCCCCCGCGCTCTGGTTGACACGGGAGGGAGGCGTCTTCGTGGCACTCACT
 20 GCGTCCGTGCTGAGCCTCCTGGCCATCGCGCTGGAGCGCAGCCTCACCATGGCGCGCAGG
 GGGCCCGCGCCCGTCTCCAGTCGGGGGCGCACGCTGGCGATGGCAGCCGCGGCCTGGGGC
 GTGTCGCTGCTCCTCGGGCTCCTGCCAGCGCTGGGCTGGAATTGCCTGGGTGCCTGGAC
 GCTTGCTCCACTGTCTTGCCGCTCTACGCCAAGGCCTACGTGCTCTTCTGCGTGCTCGCC
 TTCGTGGGCATCCTGGCCGCTATCTGTGCACTCTACGCGCGCATCTACTGCCAGGTACGC
 25 GCCAACGCGCGGCGCCTGCCGGCACGGCCCGGGACTGCGGGGACCACCTCGACCCGGGCG
 CGTCGCAAGCCGCGCTCGCTGGCCTTGCTGCGCACGCTCAGCGTGGTGCTCCTGGCCTTT
 GTGGCATGTTGGGGCCCCCTCTTCTGCTGCTGTTGCTCGACGTGGCGTGCCCGGCGCGC
 ACCTGTCTGTACTCCTGCAGGCCGATCCCTTCTGGGACTGGCCATGGCCAACTCACTT
 CTGAACCCCATCATCTACACGCTACCAACCGCGACCTGCGCCACGCGCTCCTGCGCCTG
 30 GTCTGCTGCGGACGCCACTCCTGCGGCAGAGACCGAGTGGCTCCCAGCAGTCGGCGAGC
 GCGGCTGAGGCTTCCGGGGGCTGCGCCGCTGCCTGCCCCCGGGCCTTGATGGGAGCTTC
 AGCGGCTCGGAGCGCTCATCGCCCCAGCGCGACGGGCTGGACACCAGCGGCTCCACAGGC
 AGCCCCGGTGACCCACAGCCGCCCGGACTCTGGTATCAGAACCGGCTGCAGACTGA

0929138.062501

Seq
a2
cont

SEQ ID NO:14

Human novel edg receptor protein:

5 MESGLLRPAPVSEVIVLHNYTGKLRGARYQPGAGLRADAVVCLAVCAFI VLENLAVLLV
LGRHPRFHAPMFLLLGSLTSLDLLAGAAYAANILLSGPLTLKLSPALWFAREGGVFVALT
ASVLSLLAIALERSLTMARRGPAPVSSRGRTLAMAAAAGVSLLLGLLPALGWNCLGRLD
ACSTVLPLYAKAYVLCVLAFFVGILAAICALYARIYCQVRANARRLPARPGTAGTTSTRA
RRKPRSLALLRTL SVLLAFVACWGPLFLLLLLDVACPARTCPVLLQADPFLGLAMANSI
10 LNPIIYTLTNRDLRHALLRLVCCGRHSCGRDPSGSQQSASAAEASGGLRRLPPGLDGSF
SGSERSSPQRDGLDTSGSTGSPGAPTAARTLVSEPAAD

SEQ ID NO:15

15 TGR92 DNA

ATGGAACCTTCATAACCTGAGCTCTCCATCTCCCTCTCTCTCCTCCTCTGTTCTCCCTCCC
TCCTTCTCTCCCTCACCTCCTCTGCTCCCTCTGCCTTTACCACTGTGGGGGGGTCTCT
GGAGGGCCCTGCCACCCACCTCTTCTCGCTGGTGTCTGCCTTCTGGCACCAATCCTG
20 GCCCTGGAGTTTGTCTGGGCCTGGTGGGAACAGTTTGGCCCTCTTCATCTTCTGCATC
CACACGCGGCCCTGGACCTCCAACACGGTGTTCCTGGTCAGCCTGGTGGCCGCTGACTTC
CTCCTGATCAGCAACCTGCCCCTCCGCGTGGACTACTACCTCCTCCATGAGACCTGGCGC
TTTGGGGCTGCTGCCTGCAAAGTCAACCTCTTCATGCTGTCCACCAACCGCACGGCCAGC
GTTGTCTTCCTCACAGCCATCGCACTCAACCGCTACCTGAAGGTGGTGCAGCCCCACCAC
25 GTGCTGAGCCGTGCTTCCGTGGGGGCAGCTGCCCGGGTGGCCGGGGGACTCTGGGTGGGC
ATCCTGCTCCTCAACGGGCACCTGCTCCTGAGCACCTTCTCCGGCCCCCTCCTGCCTCAGC
TACAGGGTGGGCACGAAGCCCTCGGCCTCGCTCCGCTGGCACCAGGCACTGTACCTGCTG
GAGTTCTTCCTGCCACTGGCGCTCATCCTCTTGCTATTGTGAGCATTGGGCTCACCATC
CGGAACCGTGGTCTGGGCGGGCAGGCAGGCCCGCAGAGGGCCATGCGTGTGCTGGCCATG
30 GTGGTGGCCGTCTACACCATCTGCTTCTTGCCAGCATCATCTTTGGCATGGCTTCCATG
GTGGCTTTCTGGCTGTCCGCCTGCCGATCCCTGGACCTCTGCACACAGCTCTTCCATGGC
TCCCTGGCCTTCACCTACCTCAACAGTGTCTGGACCCCGTGCTCTACTGCTTCTCTAGC
CCCAACTTCCTCCACCAGAGCCGGGCCTTGCTGGGCCTCACGCGGGGCCGGCAGGGCCCA
GTGAGCGACGAGAGCTCCTACCAACCCTCCAGGCAGTGGCGCTACCGGGAGGCCTCTAGG

0969138-062501

Sub
Q2
cont

AAGGCGGAGGCCATAGGGAAGCTGAAAGTGCAGGGCGAGGTCTCTCTGGAAAAGGAAGGC
TCCTCCCAGGGC

5 **SEQ ID NO:16**

TGR92 protein

MELHNLSSPSPSLSSSVLPPSFSPSPSSAPSAFTTVGGSSGGPCHPTSSSLVSAFLAPIL
ALEFVLGLVGNLALFIFCIHTRPWTSENTVFLVSLVAADFLLISNLPLRVDYLLHETWR
10 FGAAACKVNLFMLSTNRTASVVFLTAIALNRYLKVVQPHHVLSRASVGAAARVAGGLWVG
ILLNGLHLLSTFSGPSCLSYRVGTPKPSASLRWHQALYLLEFFLPLALILFAIVSIGLTI
RNRGLGGQAGPQRAMRVLAMVVAVYTICFLPSIIFGMASMVAFWLSACRSLDLCTQLFHG
SLAFTYLNSVLDPVLYCFSSPNFLHQSRALLGLTRGRQGPVSESSYQPSRQWRYREASR
KAEAIGKLKVQGEVSLEKEGSSQG

15

SEQ ID NO:17

Gene specific primer for 5' RACE

20 GGTAGAACTTCTAAGGTCACTAAGGCCAG

SEQ ID NO:18

nested Gene specific primer for 5' RACE

25 AAGTTCTCGGACAGGGTACTTCATGAGCAG

SEQ ID NO:19

30 Gene specific primer for 3' RACE

CCATCTCTGACTTTGCTTTCCTGTGCACCC

[illegible]

5

SEO ID NO:21

10

SEQ ID NO:22

15

SEQ ID NO:23

20

CCTTCAGACACCTTCGTCTTCAACCTGGC

25

SEQ ID NO:24

GCAGCCGAGTCGGCACTGGACTTTCAC

30

SEQ ID NO:25

primer for amplification of human TGR62

TGACCTTCTTCATCATTTGATGTG

SEQ ID NO:26

primer for amplification of human TGR62

5
GATAAAGGGCAGACCTGATTCA

09891138.062501